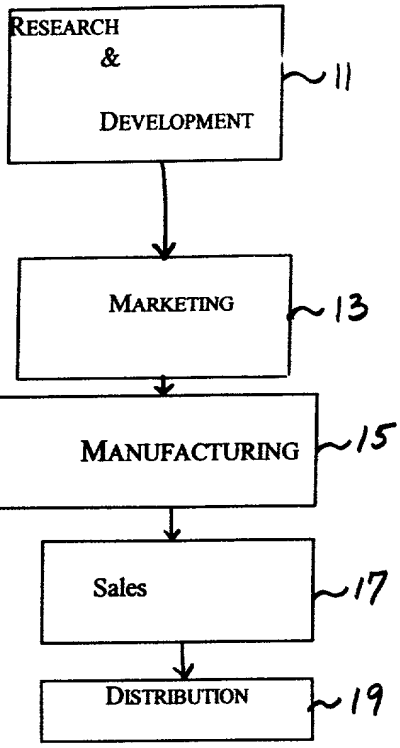

FIG. 1 - PRODUCT CYCLE

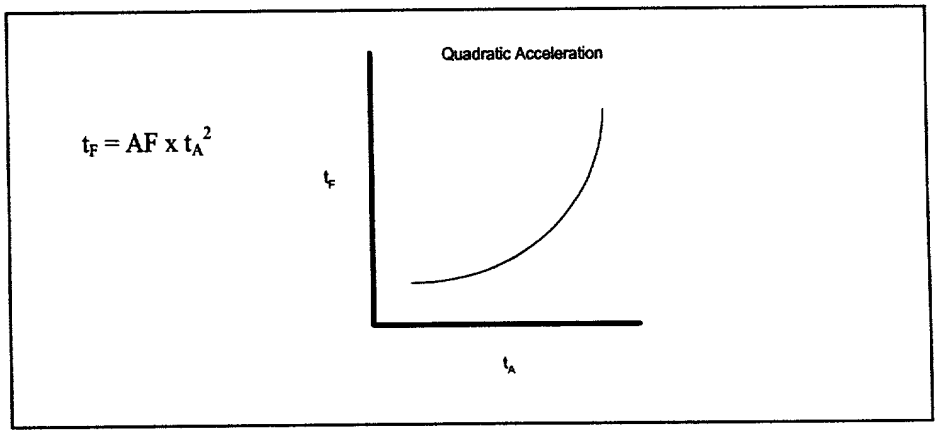

Figure 2 – Quadratic Acceleration

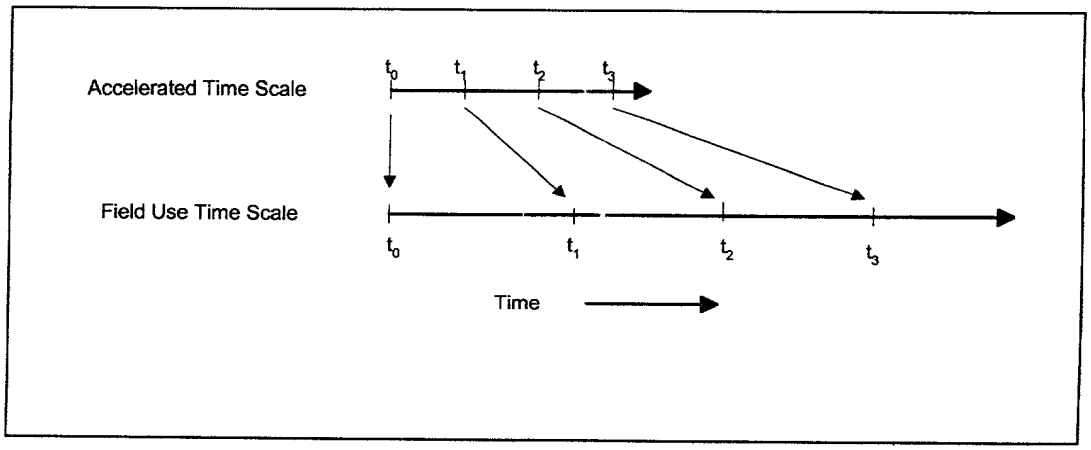

FIG. 3 - Correlation between Accelerated and Field Use Time Scales

Unit A

	CSS	HSS	RT	Vib	CE
HALT 1 First Failure (time to failure in minutes)	120	81	14	53	55.5
HALT 2 First Failure (time to failure in minutes)	91.5	90.5	63	83.5	87
$\hat{R}_i$ (see eq.4)	0.58	1.25	20.25	2.48	2.46
$\hat{R}_i^*$ (see eq. 5)	-.54	.22	3.01	0.91	0.90

$\overline{R}^*$ (see eq. 6) 0.90

$\overline{R}$	
BOM MTBF	298462
MTBF for Redesigned Unit (see eq. 12)	734221
90% Confidence Limits for R (see eq.11)	
Lower Limit	0.17
Upper Limit	35.1

FIG. 4

Unit B	CSS	HSS	RT	Vib	CE
HALT 1 First Failure (time to failure in minutes)	73.5	83	89	50	11
HALT 2 First Failure (time to failure in minutes)	121.5	83	13.5	110	13.5
$\hat{R}_i$ (see eq.4)	2.73	.00	0.02	4.84	1.51
$\hat{R}_i^*$ (see eq. 5)	1.01	0.00	-3.77	1.58	-.41

$\overline{R}^*$ (see eq. 6) -0.16

$\overline{R}$

BOM MTBF	232000
MTBF for Redesigned Unit (see eq. 12)	199520
90% Confidence Limits for R (see eq.11)	
Lower Limit	0.06
Upper Limit	12.23

FIG. 5

Unit C	CSS	HSS	RT	Vib	CE
HALT 1 First Failure (time to failure in minutes)	89	72	33	73	49
HALT 2 First Failure (time to failure in minutes)	112	78	100	63.5	19.83
$\hat{R}_i$ (see eq.4)	1.58	1.17	9.18	0.76	0.16
$\hat{R}_i^*$ (see eq. 5)	0.46	0.16	2.22	-0.28	-1.81

$\overline{R}^*$ (see eq. 6) 0.15

$\overline{R}$

BOM MTBF	363300
MTBF for Redesigned Unit (see eq. 12)	421428
90% Confidence Limits for R (see eq.11)	
Lower Limit	0.08
Upper Limit	16.61

FIG. 6